

**WHAT IS CLAIMED IS:**

1 1. A rotor for electrical equipment, said rotor having at least one pair of poles  
2 and comprising

3 a winding encircling each of said poles; and

4 at least one element fabricated of heat conductive material separate from  
5 said pole and said winding and disposed between at least one of said poles and  
6 the winding encircling this pole.

1 2. The rotor of claim 1 wherein each element has a first surface adjacent to  
2 said winding and formed so as to be in substantial contact therewith.

3. The rotor of claim 2 wherein each element has a second surface adjacent  
to said pole and formed to be in substantial contact therewith.

4. The rotor of claim 1 wherein each element has a first surface adjacent to  
said pole and formed so as to be in substantial contact therewith.

5. The rotor of claim 4 wherein each element has a second surface adjacent  
2 to said winding and formed so as to be in substantial contact therewith.

1 6. The rotor of claim 1 wherein each element includes at least one  
2 passageway for the conduction of a cooling medium therethrough.

1 7. The rotor of claim 6 wherein said rotor includes at least one manifold for  
2 receiving a cooling medium.

8. The rotor of claim 7 further including at least one coupling member for transporting the cooling medium from the manifold to each passageway.

9. The rotor of claim 8 wherein said rotor includes a shaft having a cooling medium conducting passageway therethrough.

10. The rotor of claim 1 wherein said winding is fabricated of wire having a rectangular cross section.

11. The rotor of claim 1 wherein said element is a unitary member.

12. The rotor of claim 1 wherein said element includes a pair of mating members.

13. Electrical equipment comprising

a housing;

a stationary winding; and

a rotor, said rotor including at least one pair of poles with a winding encircling each pole; and

at least one element fabricated of heat conductive material separate from said pole and said winding and disposed between at least one of said poles and the winding encircling this pole.

14. The equipment of claim 13 wherein said equipment is an alternator.

15. The equipment of claim 13 wherein said equipment is a generator.

16. The equipment of claim 13 wherein said equipment is a motor.

- 1 17. A method of cooling a rotor for electrical equipment, said rotor having at
- 2 least one pair of poles and a winding encircling each pole, said method
- 3 comprising the steps of
- 4 providing an element fabricated of heat conductive material; and
- 5 disposing said element between each rotor pole and the winding
- 6 encircling that pole.

17. A method of cooling a rotor for electrical equipment, said rotor having at least one pair of poles and a winding encircling each pole, said method comprising the steps of providing an element fabricated of heat conductive material; and disposing said element between each rotor pole and the winding encircling that pole.